Site Management Plan

Georgetown
Ocean Dredged Material Disposal Site

The following Site Management Plan for the Georgetown ODMDS has been developed and agreed to pursuant to the Marine Protection, Research, and Sanctuaries Act of 1972, as amended, for the management and monitoring of ocean disposal activities, as resources allow, by the U.S. Environmental Protection Agency and the U.S. Army Corps of Engineers.

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INTRODUCTION

It is the responsibility of EPA under the Marine Protection, Research, and Sanctuaries Act (MPRSA) of l972 to manage and monitor Ocean Dredged Material Disposal Sites (ODMDSs) designated by the EPA pursuant to Section 102 of MPRSA. As part of this responsibility, a management and monitoring plan has been jointly developed by EPA/Region IV and the Charleston District Corps of Engineers (CE) to specifically address the deposition of dredged material into ODMDSs. The South Carolina Department of Natural Resources (DNR) and the South Carolina State Ports Authority (SPA) have been represented during discussions on the requirements for the Georgetown ODMDS and will continue to be represented on the ODMDS Site Management and Monitoring Plan (SMMP) Team along with the U.S. Fish and Wildlife Service (FWS) and the National Marine Fisheries Service. The SMMP Team meets annually to discuss upcoming disposal activities, suitable management practices, and monitoring efforts for all the ODMDSs in the Charleston District. Each of these agencies has had opportunity to review and comment on this site management plan for Georgetown.

SITE MANAGEMENT

Section 228.3 of the Ocean Dumping Regulations (40 CFR 220-229) states: "Management of a site consists of regulating times, rates, and methods of disposal and quantities and types of materials disposed of; developing and maintaining effective ambient monitoring programs for the site; conducting disposal site evaluation studies; and recommending modifications in site use and/or designation." The plan may be modified if it is determined that such changes are warranted as a result of information obtained during the monitoring process.

Management Objectives. There are three primary objectives in the management of each ODMDS. These are:

- Protection of the marine environment;
- Beneficial use of dredged material whenever practical; and
- Documentation of disposal activities at the ODMDS.

The following sections provide the framework for meeting these objectives to the greatest extent possible.

Material volumes. No restrictions are presently placed on disposal volumes. Disposal of unrestricted volumes is dependent upon results from future monitoring surveys.

Material suitability. There is no general restriction regarding the type of material that may be placed at the site at this time. However, the suitability of dredged material for ocean disposal must be verified by the CE and agreed to by EPA prior to disposal. This verification will be valid for three years. The verification will involve: 1) a case-specific evaluation against the exclusion criteria (40 CFR 227.13(b)), 2) a determination of the necessity for bioassay (toxicity and bioaccumulation) testing for non-excluded material based on the potential for contamination of the sediment since last tested, and 3) carrying out the testing and determining that the non-excluded, tested material is suitable for ocean disposal.

Documentation of verification will be completed prior to use of the site. Documentation for material suitability for dredging events proposed for ocean disposal more than 5 years since last verified will be a new 103 evaluation and public notice. Documentation for material suitability for dredging events proposed for ocean disposal less than 5 years but more than 3 years since last verified will be an exchange of letters between the CE and EPA.

Should EPA conclude that reasonable potential exists for contamination to have occurred, acceptable testing will be completed prior to use of the site. Testing procedures to be used will be those delineated in the EPA/CE testing manual ('Green Book') and the Regional Implementation Manual. Only material determined to be suitable through the verification process by the CE and EPA will be placed at the designated ocean disposal site.

Time of disposal. At present no restrictions have been determined to be necessary for disposal related to seasonal variations in ocean current or biotic activity within the site. However, dredging projects with utilize hopper dredges are restricted to operating between November 1st to May 31st due to sea turtle restrictions. As monitoring results are compiled, should any such restrictions appear necessary, disposal activities will be scheduled so as to avoid adverse impacts. Additionally, if new information indicates that endangered or threatened species are being adversely impacted, restrictions may be incurred.

Disposal Technique. No specific disposal technique is required for this site. However, it is the intent of this plan to maximize any advantages of strategic placement of materials.
Utilization of any beach-compatible dredged material for beach nourishment is encouraged by EPA. Disposal of coarser material should be planned to allow placement within or accessible to the littoral zone, to the maximum extent practical and following the provisions of the Clean Water Act.

Placement of Materials Prior to any disposal of dredged materials, an agreement between EPA and CE will be reached concerning the exact placement of these materials. Permits/contracts will specify exact locations for the disposal of any material from the project.

Disposal Monitoring. For all disposal activities, the dredging contractor will be required to prepare and operate under an approved electronic verification plan for all disposal operations. As part of this plan, the contractor will provide an automated system that will continuously track the horizontal location and draft condition (vertical) of the disposal vessel from the point of

dredging to the disposal area, and return to the point of dredging. Accuracy and precision of the locational system will be at least as good as provided by Loran C. Required digital data are as follows:

(a) Date;

(b) Time;

(c) Vessel Name;

(d) Captain of Vessel;

(e) Number of Scows in tow and distance from vessel or other vessel used;

(f) Vessel position (state plane coordinates or latitude/longitude) at the commencement and cessation of dredging, as the barge is opened and closed, and heading of vessel during dump;

(g) Dredge scow draft, coincidental measurement with "f" above;

(h) Volume of material disposed; and

(i) Disposal technique used.

Within sixty (60) days prior to the commencement of some disposal operations, a baseline bathymetric survey may be conducted of the disposal area and adjacent areas. The survey will be taken along lines spaced on 100-foot intervals and be of sufficient length to adequately cover the area. Accuracy will be $\pm$ 1.0 feet. The survey will be referenced to MLLW and corrected for tide conditions at the time of the survey. As a follow-up to the baseline bathymetric survey, the CE or other site user may also be required to conduct a survey after disposal. The number of transects and accuracy required will be the same as in the baseline survey.

The user will be required to prepare and submit to the CE monthly report of operations for each month or partial month's work.

SITE MONITORING

Part 228 of the Ocean Dumping Regulations establishes the need for evaluating the impacts of disposal on the marine environment. Section 228.9 indicates that the primary purpose of this monitoring program is to evaluate the impact of disposal on the marine environment by referencing the monitoring results to a set of baseline conditions. Section 228.l0(b) states that in addition to other necessary or appropriate considerations, the following types of effects will be

considered in determining to what extent the marine environment has been impacted by materials disposed at an ocean site (excerpted):

1. Movement of materials into estuaries or marine sanctuaries, or onto oceanfront beaches, or shorelines;

2. Movement of materials toward productive fishery and shellfishery areas;

3. Absence from the disposal site of pollution-sensitive biota characteristic of the general area;

4. Progressive, non-seasonal, changes in water quality or sediment composition at the disposal site, when these changes are attributable to materials disposed of at the site;

5. Progressive, non-seasonal, changes in composition or numbers of pelagic, demersal, or benthic biota at or near the disposal site, when these changes can be attributed to the effects of materials disposed at the site; and

6. Accumulation of material constituents (including without limitation, human pathogens) in marine biota at or near the site.

Part 228.l0(c) states: "The determination of the overall severity of disposal at the site on the marine environment, including without limitation, the disposal site and adjacent areas, will be based on the evaluation of the entire body of pertinent data using appropriate methods of data analysis for the quantity and type of data available.

Impacts will be classified according to the overall condition of the environment of the disposal site and adjacent areas based on the determination by the EPA management authority assessing the nature and extent of the effects identified in paragraph (b) of this section in addition to other necessary or appropriate considerations."

The monitoring plan for the Georgetown ODMDS does not involve a specific action plan at this time. Previous baseline site work and subsequent monitoring at this and other ODMDSs to date is sufficient to meet the management objectives for this site.

Should a specific action plan be deemed necessary, it will be described and attached as Appendix A. This specific monitoring plan would be implemented in accordance with the availability of funding. Should shortfalls in funding occur, the SMMP team will recommend which aspects of the monitoring plan should receive priority. Results of monitoring will be reviewed by the SMMP team and recommendations made to the CE and EPA on appropriateness and detail of future monitoring efforts.

Modification of ODMDS SMMP. Should the results of the monitoring surveys indicate that continuing use of the ODMDS would lead to unacceptable impacts, then either the ODMDS Management Plan will be modified to alleviate the impacts, or the location of the ODMDS will be modified.